

ABSTRACT OF THE DISCLOSURE

In one embodiment, a branch aware first-in first-out memory is disclosed. The branch aware first-in first-out memory includes a memory array to store data; a push pointer coupled to the memory array to address memory locations therein in order to write data;
5 a pop pointer coupled to the memory array to address memory locations therein in order to read data; and a pointer memory coupled to the pop pointer; and control logic coupled to the pointer memory. The pointer memory saves one or more prior pop
10 pointer values of the pop pointer. The control logic may restore one of the one or more prior pop pointer values from the pointer memory into the pop pointer in response to receiving branch information.